CLAIM AMENDMENT SHEET

What is claimed is:

1. (Currently Amended) An aqueous mixture for application to concrete pavements for protection against water associated problems, comprising:

multi-compounds mixed into a stable aqueous mixture form, the compounds including alkali metal silicate, potassium methyl siliconate, a surfactant, an emulsifier and at least 50% by weight water;

wherein the mixture includes ~~between 3.000% and 10.000% parts~~ a percent by weight of alkali metal silicate solids equivalent to mixing in between 7.500% to 25.000% by weight of a alkali metal silicate solution of a 40% solids content; and

wherein the mixture is sealed into a container such that an unopened container maintained above 10°C has a shelf life of at least six months.

2. (Original) The mixture of claim 1 wherein the compounds include tartaric acid and sodium carbonate.

3. (Original) The mixture of claim 2 wherein the compounds include at least one anti-foaming agent.

4. (Original) The mixture of claim 3 wherein the compounds include at least one cleaner agent.

5. (Original) The mixture of claim 4 wherein the water includes deionized water, the anit-foaming agent includes isopropyl alcohol and the cleaner includes sodium hydrochlorite.

6. (Original) The mixture of claims 1, 2, 3, 4 or 5 wherein the surfactant includes nonylphenol polyethylene glycol ether; and the emulsifier includes a fatty acid and at least one of sodium hydroxide, tetra potassium pyrophosphate and hexameta potassium phosphate.

7. (Original) The mixture of claim 6 wherein the fatty acid includes alkylbenzensulfonic acid.

8. (Original) The mixture of claims 1, 2, 3, or 4 wherein the water includes deionized water.

9. (Original) The mixture of claim 6 wherein the water includes deionized water.

10. (Currently Amended) An aqueous mixture for application to concrete pavements for protection against water associated problems, comprising:

deionized water;

sodium silicate solids equivalent to mixing in between 7.500% to 25.000% ~~parts~~ of the mixture by weight of a sodium silicate solution of a ~~(~~40% solids content~~)~~;

potassium methyl siliconate equivalent to mixing in between 1.650% to 7.500% by weight potassium methyl siliconate of a (40% aqueous solution);

between 0.004% to 0.020% of the mixture by weight (pure) alkylbenzensulfonic acid;

between 0.050% and 0.300% of the mixture by weight (anhydrous) isopropyl alcohol;

between 0.005% to 0.075% of the mixture by weight (pure) nonylphenol polyethylene glycol ether;

sodium hydroxide equivalent to mixing in between 0.002% to 0.025% by weight of the mixture sodium hydroxide of a (50% NaOH aqueous solution);

sodium hypochlorite equivalent to mixing in between 0.003% to 0.025% of the mixture by weight sodium hypochlorite (of a 12.5% NaOCl aqueous solution);

between 0.750% to 3.500% of the mixture by weight tartaric acid of a (pure solid form measured by weight); and

between 0.532% to 2.482% of the mixture by weight anhydrous sodium carbonate of a (pure solid measured by weight);

mixed into a stable aqueous mixture form.

11. (Currently amended) The aqueous mixture of claim 10, comprising;

approximately 0.008% by weight alkylbenzensulfonic acid of a (pure) form;

approximately 0.121% by weight isopropyl alcohol of a (anhydrous) form;

approximately 0.013% nonylphenol polyethylene glycol ether of a (pure) form;

sodium hydroxide equivalent to mixing in approximately 0.005% by weight sodium hydroxide of a (50% NaOH aqueous solution);

sodium hypochlorite equivalent to mixing in approximately 0.009% sodium hypochlorite of a (12.5% NaOCl aqueous solution);

sodium silicate solids equivalent to mixing in approximately 19.212% by weight sodium silicate solution of a (40% solid content);

approximately 1.816% by weight tartaric acid of a (pure solid form measured by weight);

approximately 1.288% anhydrous sodium carbonate of a (pure solid measured by weight);

potassium methyl siliconate equivalent to mixing in approximately 4.312% by weight potassium methyl siliconate, of a (40% aqueous solution); and

approximately 73.217% by weight deionized water.

12. (Withdrawn) A method for protecting concrete pavement, comprising;

applying an aqueous chemical mixture to the concrete pavement; and

curing the mixture; thereby, by the means of the application of one mixture,

repelling water penetration at the pavement surface; and

blocking water penetration within concrete matrices of the pavement by at least hydrophilic crystallization.

13. (Withdrawn) A method for protecting concrete pavement, comprising;

applying an aqueous chemical mixture to the concrete pavement; and

curing the mixture; thereby, by the means of the application of one mixture,

repelling water penetration at the pavement surface; and

blocking water penetration within concrete matrices of the pavement by at least hygroscopic crystallization.

14. (Withdrawn) The method of claim 12 wherein the blocking of water penetration within concrete matrices of the pavement includes blocking by hygroscopic crystallization.

15. (Withdrawn) A method for making a stable containerizable aqueous mixture for application to concrete pavements to protect from water associated problems, comprising:

(1) forming a dilute mixture of at least a surfactant and emulsifier;

(2) gradually adding sodium silicate to water in a reactor and mixing;

(3) gradually adding the surfactant/emulsifier mix to the sodium silicate mix;

(4) adding to water tartaric acid in small portions at a time while continuously agitating;

(5) adding sodium bicarbonate in small portions at a time to the tartaric acid mix;

(6) gradually adding the surfactant/emulsifier/sodium silicate mix to the tartaric acid/sodium bicarbonate mix;

(7) slowly introducing potassium methyl siliconate to the surfactant/emulsifier/sodium silicate/tartaric acid/sodium bicarbonate mix and mixing; and

(8) letting the material settle for approximately one hour while covered before containerizing;

whereby a container maintained above 10 degrees C has a shelf life of at least six months.

16. (Withdrawn) The method of claim 15 including in step (1) forming a water based mixture of (a) at least one of sodium hydroxide, tetra potassium pyrophosphate and hexameta potassium phosphate; (b) a fatty acid; and (c) nonylphenol polyethylene glycol ether.

17. (Withdrawn) The method of claim 16 including in step (1) adding sodium hypochlorite and isopropyl alcohol to the mixture.

18. (Withdrawn) The method of claim 16 wherein the fatty acid includes alkylbenzensulfonic acid.

19. (Withdrawn) The method of claims 15, 16, 17 or 18 wherein the water comprises deionized water.

20. (Original) The product produced by the method of claims 15, 16, 17 or 18.

21. (Original) The product produced by the method of claim 19.

22. (Withdrawn) The method of claim 12 that includes opening treated pavement for normal use within at least one hour of application.

23. (Currently Amended) An aqueous mixture for application to concrete pavements for protection against water associated problems, comprising:

multi-compounds mixed into a stable aqueous mixture form, the compounds including water; sodium silicate solids equivalent to mixing in at least 7.5% by weight of the mixture sodium silicate solution of a ~~(~~40% solids content~~)~~; at least 0.75 % by weight of the mixture tartaric acid of a ~~(~~pure solid form measured by weight~~)~~; at least .5 % by weight of the mixture anhydrous sodium carbonate of a ~~(~~pure solid measure by weight~~)~~; an emulsifier including at least one of sodium hydroxide, tetra potassium pyrophosphate and hexameta potassium phosphate together with a fatty acid; and a surfactant including nonylphenol polyethylene glycol ether;

and wherein the mixture is sealed into a container such that an unopened container maintained above 10°C has a shelf life of at least six months.

24. (Original) The mixture of claims 1, 2, 3, 4, or 5 wherein the alkali metal includes sodium.

25. (Original) The mixture of claims 1, 2, 3, 4, or 5 wherein the sodium carbonate includes anhydrous sodium carbonate.

26. (New) The mixture of claims 1, 10, 11 or 23 wherein the mixture has a viscosity of approximately 2.4 centipoises.